

ventilation, 2% (group I) vs. 9% (group II),  $p<0.01$ ; preoperative inotropes, 11% (group I) vs. 37% (group II),  $p<0.01$ . Among the donors, age older than 60 years, 7% (group I) vs. 13% (group II),  $p=0.01$ , norepinephrine support at retrieval, 74% (group I) vs. 88% (group II),  $p<0.01$  and ischemic time, 156 min. (group I) vs. 183 min. (group II),  $p<0.01$ . Even if the occurrence of primary graft dysfunction was the similar in both groups, 21% (group I) vs. 27% (group II), this complication was treated with high dose inotropes in 10% (group I) vs. 2% (group II),  $p<0.01$ ; with ECMO in 8% (group I) vs. 25% (group II),  $p<0.01$ . One-year mortality and 5-years survival were similar in both groups: 26% (group I) vs. 29% (group II), 67% (group I) vs. 62% (group II).

**Conclusion:** The evolution of waiting list criteria and perioperative use of ECMO allowed us to transplant sicker recipients, using marginal donors, without any significant impact on short and mid-term survival.

## 064

### Interest of BNP in very old patients: the BNP Elderly Dyspnea (BED) Study

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**Background:** Few data are available on the value of BNP in older-old subjects. The aim of this study was to evaluate the benefit of BNP for heart failure diagnosis in very old patients.

**Methods:** The BED is a French multicenter observational prospective study that enrolled 383 very old subjects ( $\geq 80$  yo) hospitalized in geriatric care with acute dyspnea. BNP was measured in acute phase, before any diuretic treatment. Cardiologists categorized the subjects into 3 subgroups according to ESC criteria and blinded to BNP level: heart failure (HF), respiratory failure and mixed disease (HF and respiratory failure combined). Subjects with mixed disease were then reclassified into HF or respiratory failure groups according to the predominant feature (cardiac or respiratory). We analyzed the prognostic value (sensitivity, sensitivity and area under curve (AUC)) of the BNP for the diagnosis of HF, mixed disease included and excluded.

**Results:** Mean age was  $89\pm 5$  years, 66% of the patients were women, 57% had previous history of HF, 67% hypertension, 13% diabetes, 33% coronary heart disease and 49% atrial fibrillation. Mean LVEF was  $56\pm 13\%$ . Several patients had non-cardiac comorbidities, malnutrition 48%, severe renal failure 41%, dementia 38%, depression 32%, COPD 17%, and cancer 12%. Fifty percent of the subjects had cardiac dyspnea, 26% respiratory dyspnea and 24% dyspnea of mixed origin. Mean BNP values were 675 (835), 301 (366), 558 (796) pg/mL ( $p<0.001$ ) in cardiac dyspnea, respiratory dyspnea and mixed origin subjects respectively. However, the AUC was only 0.68 and 0.67 with mixed dyspnea included and excluded respectively. In the overall population, the sensitivity and specificity was 86% and 33% for a cutoff of 100 pg/mL, 48% and 73% for a cutoff of 400 pg/mL and 26% and 86% for a cutoff of 800 pg/mL. Similar results were obtained with mixed dyspnea subjects excluded.

**Conclusion:** In very old patients, BNP has a poor sensitivity and specificity for discriminating cardiac from pulmonary dyspnea.

## 065

### Incidental silent myocardial infarction by cardiac MRI in patients hospitalized for heart failure and preserved ejection fraction

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**Introduction:** Heart failure with preserved ejection fraction (HFPEF) is an incurable but prevalent disease associated with poor prognosis. Whether cardiac MRI with late enhancement (LE) analysis could provide new insight into myocardial structure and pathophysiology is investigated in this work.

**Methods:** 50 consecutive and clinically stabilized patients with HFPEF (Framingham clinical criteria, EF  $>50\%$  and BNP level  $>100$  pg/ml) were explored by MRI (Siemens 1.5T, Symphony and Avanto) for cine-SSFP as well as 10-min LE following Gadolinium infusion sequences, 2 months after an acute decompensation. Patients were stratified according to the distribution of LE imaging at least in 2 adjacent segments (subendocardial, subepicardial or intramyocardial). Interestingly subendocardial LE localization was considered as a marker of myocardial infarction. Demographic data and medical history were also collected.

**Results:** Mean age was  $73\pm 9$  yrs and sex ratio was 0.85. The magnitude of hypertension, diabetes and chronic kidney disease was 78%, 47% and 24%, respectively. A history of ischemic heart disease (prior MI and/or isolated coronary lesions) was reported in 23% of pts. By MRI, EF was  $57\pm 11\%$ , indexed left ventricular end-diastolic volume was  $78\pm 23$  ml/m<sup>2</sup> and left atrial end-systolic volume was  $111\pm 35$  ml. Late enhancement analysis was completed in 47 patients. Twenty two patients had no LE. Among the 25 remaining patients, subendocardial, intramyocardial and subepicardial LE was found in 62%, 32% and 20% of cases, respectively. The diagnosis of myocardial infarction was more frequently detected by MRI than orally reported in the medical report (32% vs. 23% respectively,  $p<0.0001$ ) overall.

**Conclusion:** Cardiac MRI provides new insight into HFPEF by revealing more silent ischemic heart disease than orally documented

## 066

### Atrial arrhythmias in patients with heart failure and preserved ejection fraction.

#### Results from the prospective French and Swedish KaRen study

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**Background:** the prevalence of atrial arrhythmias (AAr) in patients with heart failure (HF) is high, namely in HF with preserved ejection fraction (HFpEF). KaRen study is a French and Swedish prospective registry enrolling patients with an acute HFpEF and reassessing these patients 4-8 weeks later after conventional HF treatment.

**Aim:** we sought to define the exact prevalence and the main clinical correlates of AAr diagnosed in the patients included in KaRen.

**Method:** 535 patients were prospectively recruited and 58.5% had a history of AAr. Clinical characteristics, co-morbidities, risk factors, left ventricular ejection fraction, blood chemistry and drug treatment were recorded at baseline and 4-8 weeks later.

**Results:** The main characteristics at baseline and 4-8 weeks follow-up of the 313 pts with a history of AAr (AAr+) and of the 220 without AAr (AAr-) are displayed in the table. Patients with AAr were older ( $p=0.0004$ ) and tend to have higher NT-proBNP levels at baseline. There were no significant differences for diabetes, Serum creatinin, hemoglobin or left ventricular ejection fraction. In the 313 patients AAr+, 69% were treated by beta-blockers at the admission (significantly more than in group AAr-,  $p=0.0034$ ), 59.7% were treated with an ACE-inhibitor, 60% got an oral anticoagulant ( $p<0.0001$ ) at baseline and 73% at the 4-8week visit.

**Conclusion:** AAr are extremely prevalent in patient admitted for HFpEF. Prevalence increases with increasing age and higher blood pressure. It leads to significantly more prescription of beta-blockers. Interestingly, NT-proBNP decreased more in AAr+ patients after treatment.